34. EMYDA PUNCTATA, *Gray*.

Tab. LV. & LVI.

Emyda ceylonensis, Gray, Cat. Sh. Rept. Suppl. p. 117.

Hab. India; Ceylon; Goa. Common in tanks, and breeding in them, and in ditches.

The figure is taken from a specimen in spirits; and I do not believe that it, or any species of the genus, has ever been imported alive into this country; but it is figured from life in Gray and Hardwicke's 'Illustrations of Indian Zoology.'

35. CHELONIA IMBRICATA.

Tab. LVII. & LVIII. (young).

Caretta imbricata, Gray, Cat. Sh. Rept. Suppl. p. 119.

Hab. The Ocean.

According to Dr. Holbrook this animal is only esteemed for the substance it affords, called "Tortoise-shell," which is but the laminæ or plates that cover the bony shell. Other species of *Chelonia* have a similar covering; but in no other are these plates sufficiently thick to be of any value in the arts.

"These laminæ are obtained by exposing the convex portion of the shell to a certain degree of heat, which destroys the connexion between the plate and the shell; it is now recurved from the borders to the centre, and can then be easily removed. These plates vary in thickness and in transparency, and are consequently arranged in classes of different value. Tortoise-shell is not considered of the best value unless the Tortoise has reached a certain size, about one hundred and sixty pounds; before that state it is too thin. The quality obtained varies much in weight in different animals; fifteen pounds is the most obtained even from animals of the largest size; yet this substance is so valuable that a *Chelonia imbricata*, of the same dimensions as the Green Turtle, would sell for ten times as much." "I am not aware that the habits of this animal differ from those of the *Chelonia caretta*; they seek similar localities and the same food, but in confinement they seem much more ferocious. I have seen them bite severely the *Chelonia mydas*, when swimming together in the same reservoir, though the other gave no offence; nor did he offer retaliation for the injury received."

Mr. Darwin gives, in his 'Journal of Researches' (p. 459), a curious account of how they catch and treat these Tortoises in the Chagos archipelago.

36. CHELONIA MYDAS.

Tab. LIX. & LX. (young).

Mydas viridis, Gray, Cat. Sh. Rept. Suppl. p. 119.

Hab. Atlantic Ocean.

Dr. Holbrook gives the following interesting account of the habits of this animal:—"They live mostly in deep water, feeding on marine plants, especially one called Turtle-grass (*Zostera marina*); this, according to Audubon, they cut near the roots, to procure the most tender and succulent part, which alone is eaten, while the rest of the plant floats to the surface, and is there collected in large fields—a sure indication that the feeding-ground of the Green Turtle is near. In confinement, however, they eat readily enough purslain (*Portulaca oleracea*), and even grow fat on this nourishment.

"Green Turtles are very seldom seen to approach the land, unless at certain seasons to lay their eggs; and in the months of April and May great numbers seek for this purpose the sandy shores of desolate islands or the uninhabited banks of certain rivers, where they are least liable to interruption in their work of reproduction. The Tortugas Islands are a favourite haunt; these are four or five uninhabited sand-banks, which are only visited by turtlers and wreckers. Between these islands are deep channels, so that the Turtles come at once to good landing. They are not confined, however, to these islands, but are found abundantly on other keys and inlets on the main. The female arrives by night: slowly and cautiously she approaches the shore, and, if undisturbed, crawls at once over the sand above high-water mark; here, with her fins, she digs a hole one or two feet deep, in which she lays her eggs, between one and two hundred in number. These she 'arranges in the most careful manner, and then scoops the loose sand back over the eggs, and so levels and smooths the surface that few persons, on seeing the spot, could imagine any thing had been done to it' (*Audubon*). This accomplished, she retreats speedily to the water, leaving the eggs to be hatched by the heat of the sun, which is generally accomplished in about three weeks. Two or three times in the season does the female return to nearly the same spot and deposit nearly the same number of eggs, so that the whole amount annually would be four or five hundred; and it is not a little singular that animals so low in the scale of creation should have the instinct to return to these haunts from great distances—hundreds, and even thousands of miles, in some instances in three weeks. Dr. Strobel informed me that several Turtles were captured at Tortugas, marked, and carried to Key West, there confined in a turtle-pen or 'crawl,' which was destroyed by a storm; the animals escaped, and in a few days were recaptured at Tortugas. During the actual time of incubation, Turtles may be approached without caution; for they are then so intent on this work of reproduction that nothing will disturb them.

"It is during the breeding-season that these animals suffer most from their enemies; they are then taken in a variety of ways, and are brought to our markets in immense numbers, being held in high estimation as a wholesome and delicious food. Many are caught at night on shore; these are turned on their backs; nor can they resume their natural position, in consequence of the shortness of their necks and the peculiar arrangement of their fins; and thus they remain until they can be leisurely collected the next day. Some are harpooned in the water; and great nets are spread for others at the entrance of creeks and rivers. Many are also taken by an instrument called a *peg*, which has been in common use since the time of Catesby.

"Audubon observes that he saw a man who, with his *peg*, had been known to secure eight hundred Green Turtles in one year—an immense number, certainly. When taken they are kept in pens, called 'crawls,' that are so placed in the water as to be filled at every flood-tide; and here they remain until sold.

THOMAS BELL *A Monograph of the Testudinata* LONDON, 1832-1836 THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA Octavo